

NEBRASKA ADMINISTRATIVE CODE

Title 132 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 5 - CRITERIA FOR CONSTRUCTION AND DEMOLITION WASTE DISPOSAL AREAS

001 Applicability. The requirements of this chapter apply to all construction and demolition waste disposal areas required to have a permit pursuant to Chapter 2, 001.

002 Locational criteria. Construction and demolition waste disposal areas shall be located in accordance with the standards as described in this section. The application shall include documentation verifying that the solid waste disposal area complies with the following.

002.01 The vertical separation between the lowest point of the lowest cell and the predicted maximum water table elevation shall be sufficient to maintain a ten (10) foot vertical distance between deposited waste and the water table elevation based on reliable existing regional data, if available. A lesser separation distance may be approved by the Director provided the applicant shows good cause.

002.02 The application shall include a description of the land use and population density of the proposed facility and of the area surrounding the facility within one mile of the facility boundaries.

002.03 Floodplains. A construction and demolition waste disposal area or a lateral or vertical expansion of these facilities, shall not be located in a 100-year flood plain, unless the owner or operator can demonstrate that the disposal area will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment.

002.04 Wetlands. A construction and demolition waste disposal area shall not be located in wetlands.

002.05 Unstable areas. An owner or operator of a construction and demolition waste disposal area located in an unstable area shall demonstrate in the permit application that engineering measures have been incorporated into the facility's design to ensure that the integrity of the final cover system of the construction and demolition waste disposal area will not be disrupted.

002.05A An owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

002.05A1 On-site or local soil conditions that may result in significant differential settling;

002.05A2 On-site or local geologic or geomorphologic features; and

002.05A3 On-site or local human-made features or events, both surface and subsurface.

002.05B For purposes of this section,

002.05B1 "Unstable area" shall mean a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the facility structural components responsible for preventing releases from the facility. This term may include poor foundation conditions, areas susceptible to mass movements, and Karst terranes.

002.05B2 "Poor foundation conditions" shall mean those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of a solid waste management facility.

002.05B3 "Areas susceptible to mass movements" shall mean those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the solid waste management facility, because of natural or human-induced events, results in the down slope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluction, block sliding, and rock fall.

002.05B4 "Karst terranes" shall mean areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

003 Design criteria. Construction and demolition waste disposal areas shall be designed, constructed and operated to:

003.01 Be protective of human health and the environment;

003.02 Not result in pollution of the waters of the state; and

003.03 Include run-on/run-off control systems which shall be designed, constructed and maintained to meet the following criteria:

003.03A Surface water courses and run-on shall be diverted from the construction and demolition waste disposal area by devices such as trenches, conduits and proper grading to minimize infiltration and erosion of cover material.

003.03B Surface water courses and run-off shall be diverted from the construction and demolition waste disposal area by devices such as trenches, conduits and proper grading to minimize infiltration and erosion of cover material. The construction and demolition waste disposal area shall be constructed and graded so as to promote rapid surface water run-off without excessive erosion. Excessive erosion shall mean an erosion rate of five (5) tons per acre per year, or more.

003.03C Run-off from the active portion of the construction and demolition waste disposal area shall be handled in accordance with section 004 of this Chapter.

003.03D Regrading shall be done as required during construction and after completion to avoid ponding of precipitation and to maintain cover material integrity. On-site drainage structures and channels shall be designed for at least a twenty-four (24) hour, twenty-five (25) year storm.

003.04 A construction and demolition waste disposal area application shall include a construction quality assurance plan for any engineered containment systems, which shall be submitted with the application. The plan shall assure adequate construction and testing of the containment system components as called for in design specifications in the facility plan, and shall include a schedule of construction. The construction quality assurance plan shall be prepared and signed by a professional engineer registered in the State of Nebraska.

004 Operational criteria. Operations of all construction and demolition waste disposal areas shall be in accordance with the approved operational plan and Chapter 2 requirements.

004.01 A construction and demolition waste disposal area shall only accept waste defined as construction and demolition waste. All unacceptable wastes shall be removed from the site daily.

004.02 A construction and demolition waste disposal area shall be operated at all times so as to not constitute a hazard, or a threat to human health or the environment.

004.03 The operation of a construction and demolition waste disposal area shall include litter control and disease vector prevention and control programs.

004.04 Air Criteria. Measures shall be taken to control fugitive dust in accordance with Title 129 - Nebraska Air Quality Regulations during excavation, vehicle movement, placement of construction and demolition waste or covering waste.

004.05 Access Requirements. An owner or operator of a construction and demolition waste disposal area shall control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes by using artificial barriers, natural barriers, or both, as appropriate. All vehicular access points shall be equipped with gates that can be locked. All access control gates shall be locked during non-operating periods of the construction and demolition waste disposal area.

004.06 Surface Water Requirements. A construction and demolition waste disposal area shall not:

004.06A Cause a discharge of pollutants into waters of the state, including wetlands, that violate any requirements of Title 119 - Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System.

004.06B Cause the discharge of a non-point source of pollution to waters of the State that violate any requirement of an area-wide or state-wide water quality management plan that has been approved under section 208 or 319 of the Clean Water Act, as amended.

004.07 An owner or operator shall not accept construction and demolition waste at the facility if the disposal capacity has been reached. Construction and demolition waste shall only be placed in areas designated for disposal.

004.08 Any materials salvaged from the construction and demolition waste disposal area shall be stored in a manner protective of human health and environment and removed within a reasonable time period.

004.09 Cover requirements. Owners and operators of construction and demolition waste disposal areas shall periodically cover with a sufficient amount of earthen material to adequately control disease vectors, fires, and blowing litter.

004.10 All completed areas of a construction and demolition waste disposal area shall be properly reclaimed with final cover pursuant to the requirements of section 005 of this chapter.

004.11 The operational plan for a construction and demolition waste disposal area shall include:

004.11A A description of the days and hours of operations;

004.11B A description of the number and duties of employees;

004.11C Numbers, type and size of equipment on site as well as provisions for obtaining back up equipment, if necessary;

004.11D A contingency plan for addressing reasonably foreseeable events, including, but not limited to, wet weather, high winds, frozen conditions, fires or natural disasters; and

004.11E A schedule of filling and a phased site development plan.

005 Closure criteria. Owners and operators of construction and demolition waste disposal areas shall close according to the approved closure plan, and shall install the final cover within six (6) months of the last receipt of waste. Owners or operators of all construction and demolition waste disposal areas shall close in the following manner.

005.01 The final cover shall consist of at least three (3) feet of earthen material and be capable of sustaining adequate vegetative cover. Lesser depths of final cover may be approved by the Director provided the applicant can show that the lesser amount is sufficient to minimize infiltration, erosion, settlement and promote surface water run-off.

005.02 Final grades and side slopes of the closed area shall prevent run-on and run-off from eroding or otherwise damaging the final cover.

005.03 Appropriate vegetative cover shall be established and maintained as soon as practical after final grading.

005.04 Within 90 days following the installation of the final cover system, the owner or operator shall record a permanent notation on the deed to the disposal area property, or some other permanent property record or instrument that is normally examined during the title search and shall provide documentation to the Department that such notation or instrument has been recorded in the permanent records of the county Register of Deeds. A copy of this record and documentation shall be placed in the operating record. This notation or instrument must, in perpetuity, notify any potential purchaser of the following information:

005.04A The existence of a closed construction and demolition waste disposal area on the property;

005.04B The type, depth and location of the waste on the property, as well as the existence of any monitoring systems; and

005.04C Any restrictions on the use of the property which may be provided to protect the integrity of the final cover or any components of the containment system.

005.05 The owner or operator of a construction and demolition waste disposal area shall notify the Department, in writing, at least 180 days prior to the date the owner or operator expects to begin closure. The owner or operator shall place a copy of this notice in the operating record.

005.06 The owner or operator of a construction and demolition waste disposal area shall begin implementation of the closure plan required in section 005.11 of this rule within thirty (30) days after the date on which the facility receives the final volume of waste. The owner or operator shall notify the Department, in writing, of the date of the receipt of the final volume of waste, the date of the initiation of closure, and the date of the installation of the final cover system, as applicable. The owner or operator shall place copies of these notices in the operating record.

005.07 The owner or operator of a construction and demolition waste disposal area shall complete closure activities in accordance with the closure plan within 180 days after the last receipt of waste. Extensions of the closure period may be granted by the Department if the owner or operator demonstrates that closure will, due to circumstances beyond the operator's control, take longer than 180 days and the owner or operator has taken, and will continue to take, all steps to prevent threats to human health and the environment from the unclosed construction and demolition waste disposal area.

005.08 Following the closure of the construction and demolition waste disposal area or any part of the area, the owner or operator shall submit Construction Quality Assurance documentation, a topographical survey showing final contours, and a certification to the Department signed by an independent professional engineer registered in the State of Nebraska verifying that closure has been completed in accordance with the approved closure plan. This closure documentation and certification shall also be placed in the operating record.

005.09 Owners or operators shall not implement modifications to the design or operation of a construction and demolition waste disposal area which results in modifications to the closure plan without prior approval of the Department.

005.10 No person shall excavate, disturb the final cover, or remove any deposited materials from any active or closed construction and demolition waste disposal area without having received prior approval from the Department. Requests for approval shall demonstrate that disturbance of the final cover, or other components of the containment system, including any removal of waste, will not increase the potential threat to human health and the environment and shall include:

005.10A An operational plan identifying the planned activities and the area involved;

005.10B A survey identifying the lines and grades defining the limits of the proposed excavation both vertically and horizontally;

005.10C Estimated number of cubic yards and type of material to be excavated;

005.10D Location where excavated material is to be deposited;

005.10E Type of equipment to be used to transport material;

005.10F Estimated time required for excavation and disposal procedure; and

005.10G Provisions for closing the excavated or disturbed area.

005.11 Closure Plan. Owners and operators of all permitted construction and demolition waste disposal areas shall prepare and submit a written closure plan that describes the steps necessary to close the construction and demolition waste disposal area in phases, or the entire area, whichever is applicable. This closure plan shall be provided in the permit application. The closure plans shall include but not be limited to, a description of the methods of closure which comply with the requirements of 005.01 to 005.03 and the following:

005.11A A description of the final cover design including methods and procedures to install the final cover;

005.11B An estimate of the largest area of the construction and demolition waste disposal area ever requiring a final cover at any time during the active life of the construction and demolition waste disposal area;

005.11C An estimate of the maximum inventory of wastes ever on-site over the active life of the construction and demolition waste disposal area; and

005.11D A schedule for the completion of all activities necessary to satisfy the closure criteria.

006 Post-closure Criteria. The owners or operators of all construction and demolition waste disposal areas shall comply with post-closure rules and regulations for a period of five (5) years. The length of the post-closure period may be increased, if the Department determines that the lengthened period is necessary to protect human health and the environment. The length of the post-closure period may be reduced, if the Department determines that the reduced period is sufficient to protect human health and the environment.

006.01 Post-closure care shall include, at a minimum, the performance of each of the following activities:

006.01A Annual inspection and maintenance of the cover to ensure integrity and effectiveness, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;

006.01B Annual inspection and maintenance of any access control structures and posted signs; and

006.01C Maintenance and operation of any environmental control features which are included in the design and operation of the construction and demolition waste disposal area or required by the Department to protect human health and the environment.

006.02 Post-closure plan. Each permit application shall include a post-closure plan. Any revisions shall be forwarded to the Department for approval. The post-closure plan shall include, but not be limited to the following:

006.02A A description of the monitoring and maintenance activities required in section 006.01 for each construction and demolition waste disposal area and the frequency at which these activities will be performed;

006.02B Name, address, and telephone number of the person or office to contact about the closed construction and demolition waste disposal area during the post-closure period; and

006.02C A description of the planned uses of the property during the post-closure period and a description of the period of time during which access to the facility will be controlled. Post-closure use of the property shall not disturb the integrity of the final cover, or any other components of the containment system.

006.03 The owner or operator shall begin implementing the post-closure plan required in this section immediately after final closure of the construction and demolition waste disposal area is completed and continue implementing the plan over the entire post-closure period.

007 Required Maps and Drawings. The permit application for a construction and demolition waste disposal area shall include the following maps and drawings, and shall be prepared by a professional engineer registered to practice in the State of Nebraska. When a structure described in 007.03 and 007.04 is not present at the site, a notation shall be made on the required map or drawing.

007.01 A topographic map or maps of the construction and demolition waste disposal area drawn to the scale of 200 feet to the inch or larger, containing 5-foot contour intervals where the relief exceeds 20 feet, and 2-foot contour intervals where the relief is 20 feet or less, and referred to a United States Geological Survey datum.

007.02 A topographic map indicating the proposed final contours and landscaping of completed solid waste disposal areas with a statement of the proposed final use of the site.

007.03 Maps of the site, drawn to scale, indicating the location or existence of the following items:

007.03A Points of entrance to and exit from the facility and to and from the operating area of the facility; devices for controlling unauthorized access to the facility site;

007.03B Loading, dumping and any temporary storage areas;

007.03C Interior roads and ramps;

007.03D Salvage operations;

007.03E Fill area;

007.03F Borrow areas;

007.03G Drainage facilities, structures, walls, cribbing, surface protection devices, and any other devices as are necessary to comply with applicable water quality standards; and

007.03H If present, the following: fire protection facilities, utilities to service the site, gas and oil wells, high tension power lines, and fuel transmission pipelines.

007.04 Maps of the area within one-quarter mile of the boundaries of the site, drawn to scale, showing the location of:

007.04A Waterways and surface drains;

007.04B Nearby surface waters;

007.04C Borings, wells, springs, and their surface elevations, and depths and elevations of water levels;

007.04D Field tile drains; and

007.04E Underground and surface mines, elevations of mine pools, and mine pool discharges.

Enabling Legislation: Neb. Rev. Stat. §§13-2034; 13-2036; 81-1504 (1),(2),(7),(11)-(13),(20); 81-1505; 81-1528 (7)

Legal Citation: Title 132, Ch. 5, Nebraska Department of Environmental Quality

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